

CUL2 / Cullin 2 Antibody (aa696-745)
Rabbit Polyclonal Antibody
Catalog # ALS14746**Specification**

CUL2 / Cullin 2 Antibody (aa696-745) - Product Information

Application	IF, WB, IHC
Primary Accession	Q13617
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	87kDa KDa

CUL2 / Cullin 2 Antibody (aa696-745) - Additional Information**Gene ID** 8453**Other Names**

Cullin-2, CUL-2, CUL2

Target/Specificity

Cullin 2 Antibody detects endogenous levels of total Cullin 2 protein.

Reconstitution & Storage

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

Precautions

CUL2 / Cullin 2 Antibody (aa696-745) is for research use only and not for use in diagnostic or therapeutic procedures.

CUL2 / Cullin 2 Antibody (aa696-745) - Protein Information**Name** CUL2 ([HGNC:2552](#))**Function**

Core component of multiple cullin-RING-based ECS (ElonginB/C- CUL2/5-SOCS-box protein) E3 ubiquitin-protein ligase complexes, which mediate the ubiquitination of target proteins (PubMed: [11384984](http://www.uniprot.org/citations/11384984), PubMed: [26138980](http://www.uniprot.org/citations/26138980), PubMed: [29775578](http://www.uniprot.org/citations/29775578), PubMed: [29779948](http://www.uniprot.org/citations/29779948)). CUL2 may serve as a rigid scaffold in the complex and may contribute to catalysis through positioning of the substrate and the ubiquitin-conjugating enzyme (PubMed: [10973499](http://www.uniprot.org/citations/10973499), PubMed: [11384984](http://www.uniprot.org/citations/11384984), PubMed: [12609982](http://www.uniprot.org/citations/12609982), PubMed: [24076655](http://www.uniprot.org/citations/24076655), PubMed: [9122164](http://www.uniprot.org/citations/9122164)). The E3

ubiquitin-protein ligase activity of the complex is dependent on the neddylation of the cullin subunit and is inhibited by the association of the deneddylated cullin subunit with TIP120A/CAND1 (PubMed:12609982, PubMed:24076655, PubMed:27565346). The functional specificity of the ECS complex depends on the substrate recognition component (PubMed:10973499, PubMed:26138980, PubMed:29775578, PubMed:29779948, PubMed:9122164). ECS(VHL) mediates the ubiquitination of hypoxia-inducible factor (HIF) (PubMed:10973499, PubMed:9122164). A number of ECS complexes (containing either KLHDC2, KLHDC3, KLHDC10, APPBP2, FEM1A, FEM1B or FEM1C as substrate-recognition component) are part of the DesCEND (destruction via C-end degrons) pathway, which recognizes a C-degron located at the extreme C terminus of target proteins, leading to their ubiquitination and degradation (PubMed:26138980, PubMed:29775578, PubMed:29779948). ECS complexes and ARIH1 collaborate in tandem to mediate ubiquitination of target proteins (PubMed:27565346). ECS(LRR1) ubiquitinates MCM7 and promotes CMG replisome disassembly by VCP and chromatin extraction during S- phase (By similarity).

Cellular Location

Nucleus {ECO:0000250|UniProtKB:Q9D4H8}.

Volume

50 µl

CUL2 / Cullin 2 Antibody (aa696-745) - Protocols

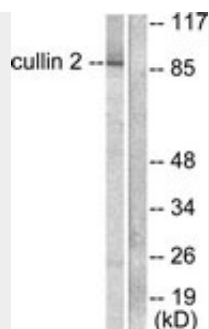
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

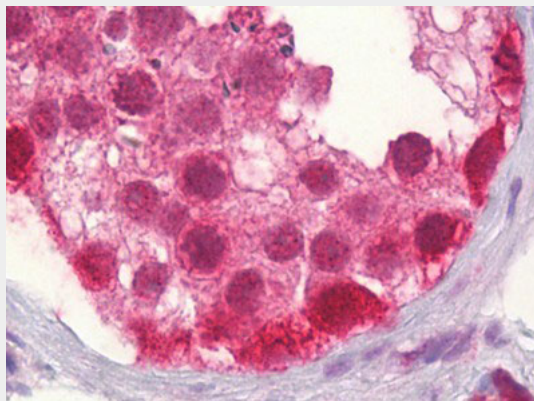
CUL2 / Cullin 2 Antibody (aa696-745) - Images



Immunofluorescence of NIH-3T3 cells, using Cullin 2 Antibody.



Western blot of extracts from LOVO cells, using Cullin 2 Antibody.



Anti-CUL2 / Cullin 2 antibody IHC of human testis.

CUL2 / Cullin 2 Antibody (aa696-745) - Background

Core component of multiple cullin-RING-based ECS (ElonginB/C-CUL2/5-SOCS-box protein) E3 ubiquitin-protein ligase complexes, which mediate the ubiquitination of target proteins. May serve as a rigid scaffold in the complex and may contribute to catalysis through positioning of the substrate and the ubiquitin- conjugating enzyme. The E3 ubiquitin-protein ligase activity of the complex is dependent on the neddylation of the cullin subunit and is inhibited by the association of the deneddylated cullin subunit with TIP120A/CAND1 (By similarity). The functional specificity of the ECS complex depends on the substrate recognition component. ECS(VHL) mediates the ubiquitination of hypoxia-inducible factor (HIF).

CUL2 / Cullin 2 Antibody (aa696-745) - References

- Pause A.,et al.Proc. Natl. Acad. Sci. U.S.A. 94:2156-2161(1997).
- Wada H.,et al.Biochem. Biophys. Res. Commun. 257:100-105(1999).
- Ota T.,et al.Nat. Genet. 36:40-45(2004).
- Deloukas P.,et al.Nature 429:375-381(2004).
- Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.